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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,285

04/12/2007

Edward Walenty Tota

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24336

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09/12/2008

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EXAMINER

WEBER, JONATHAN C

ART UNIT

PAPER NUMBER

3641

MAIL DATE

DELIVERY MODE

09/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,285	Applicant(s) TOTA, EDWARD WALENTY	
	Examiner Jonathan C. Weber	Art Unit 4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

Pursuant to the response filed on 26 June 2008, the claim amendments have been entered into the instant application. There were no amendments to the drawings or specification. Claims 8-15 have been cancelled, and claims 16-21 have been added to the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 16-19** are rejected under 35 U.S.C. 102(b) as being anticipated by Published International Application WO 00/60301 by Gavrilovic et al (Gavrilovic).

Regarding claim 16, Gavrilovic discloses a rock breaking cartridge (In view of Figure 14) comprising: a tubular body (In view of Figure 14); a first cap (26, Figure 14) and an outer second cap (22, Figure 14) located inside the tubular body (In view of Figure 14, 22 & 26 are inside the tubular body defined by 86, 48, & 50) and spaced from each other (In view of Figure 14, 22 & 26 are spaced from each other by explosive or energetic material 18); an enclosure defined between the first and second caps (50, Figure 14); a stemming device positioned inside the tubular body being spaced from the

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enclosure (86 & 24F, Figure 14); a filler inside the tubular body between the second cap and the stemming device (14, Figure 14); and a propellant inside the enclosure (18, Figure 14); wherein ignition of the propellant generates force inside the enclosure which moves at least the second cap, axially away from the first cap, into the filler to cause the filler to flow against, and thereby activate, the stemming device to radially expand a portion of the tubular body (The reference implicitly discloses this relationship, in that the structure is similar and would operate in the same manner, Page 12, Lines 19-27).

Regarding claim 17, Gavrilovic discloses wherein the stemming device includes components with relatively inclined surface which are relatively movable thereby to cause a portion of the tubular body in which the stemming device is located to expand radially (In view of Figure 14, Page 12, Lines 19-27).

Regarding claim 18, Gavrilovic discloses wherein the tubular body is weakened to facilitate expansion thereof by the stemming device (Page 12, Lines 16-17).

Regarding claim 19, Gavrilovic discloses wherein the tubular body is split at least in a longitudinal sense thereby defining at least one portion of the tubular body which is radially expansible upon activation of the stemming device (See Abstract, Lines 7-9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Published International Application WO 00/60301 by Gavrilovic et al (Gavrilovic) in view of U.S. Patent 2,812,712 issued to Ashurst (Ashurst).

Regarding claim 20, Gavrilovic fails to disclose the exact characteristics of the stemming device as specified.

Ashurst discloses the rock breaking cartridge further comprising two wedge-shaped components forming a substantially cylindrical body which are positioned inside the tubular body with a relatively close fit with a large face of one component facing the filler (In view of Figure 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Gavrilovic with the teachings of Ashurst. The suggestion/motivation to combine these references would be to provide an alternative means for sealing the blast hole prior to and during blasting.

Regarding claim 21, Gavrilovic discloses extending a lead wire to an igniter in the propellant but fails to disclose the exact characteristics of the stemming device as specified and the path of the lead wire through the components of the stemming device.

Ashurst discloses wherein one component includes a groove in an outer surface (In view of Figure 3, 8 & 8') to accommodate a lead wire (9, Figure 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Gavrilovic with the teachings of Ashurst. The suggestion/motivation to combine these references would be to provide

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an alternative means for sealing the blast hole prior to and during blasting with appropriate elements to facilitate proper wiring of the device.

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan C. Weber whose telephone number is

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(571)270-5377. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (571)272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. C. W./
Examiner, Art Unit 4174

/Troy Chambers/

Primary Examiner, Art Unit 3641